

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : SONY CORP

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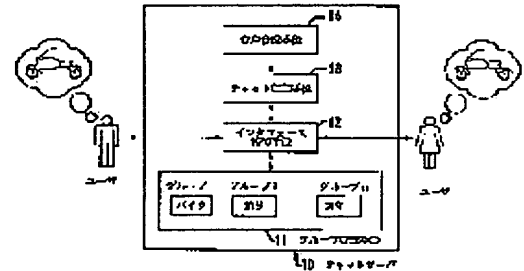
(72)Inventor : HIDAKA ISAO
KAWAMOTO HIROSHI

(54) CHAT SERVER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a chat server in which communication can be easily attained, and conversation with plural users can be enjoyed.

SOLUTION: A group managing means 11 manages items to be chatted by users by grouping them. An interface controlling means 12 operates interface control with a user who performs access to the group. When at least two users perform access to the same one group, a chat controlling means 13 operates chat control being the message exchange of the voices of users. When plural users perform access to the same one group, a voice synthesizing means 14 synthesizes the voice of each user, and transmits the synthesized voice to the chat controlling means 13.



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CLAIMS

[Claim(s)]

[Claim 1] The chat server which is characterized by providing the following and which provides a user with the chat which is message switching service between users. The group management tool which divides a chat item into a group and manages it. An interface-control means to perform an interface control with the user who has accessed the aforementioned group. Chat control means which carry out [voice / of the aforementioned users] chat control when at least two aforementioned users access to the same aforementioned group. A speech synthesis means to compound each user's voice and to transmit a synthesized speech to the aforementioned chat control means when two or more aforementioned users access to the same aforementioned group.

[Claim 2] The aforementioned interface-control means is a chat server according to claim 1 characterized by performing an interface control with the aforementioned user using HTTP (Hyper Text Transfer Protocol).

[Claim 3] The aforementioned interface-control means is a chat server according to claim 1 characterized by transmitting against the profile data of the aforementioned user who has already accessed the aforementioned group.

[Claim 4] The aforementioned interface-control means is a chat server according to claim 1 characterized by connecting the aforementioned users with a dial-up line, without minding the aforementioned chat control means.

[Claim 5] The terminal which the aforementioned user uses is a chat server according to claim 1 characterized by being a portable telephone.

[Claim 6] The aforementioned interface-control means is a chat server according to claim 5 characterized by connecting the aforementioned users with the transceiver mode of the aforementioned portable telephone, without minding the aforementioned chat control means.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] Especially this invention relates to the chat server which provides a user with the chat which is message switching service between users about a chat server.

[0002]

[Description of the Prior Art] Now, communication service provides the user with various communication space on a communication network. A user can go in and out freely to this communication space, and in it, various kinds of services can be enjoyed or he can perform informational exchange etc.

[0003] As entertainment service which offers such communication space, the chat and the message dial have spread widely. A chat is the service which is on personal-computer-communications service, exchanges the message in a character, and can talk (talkative). A computer network is used as a communication network, the character driven in from the keyboard at hand through the server is displayed on a partner's display, and a partner's keyboard grabbing is displayed at hand. And conversation can be virtually enjoyed by sending a message mutually one after another.

[0004] If a message dial registers the connection number and recitation number which were beforehand decided to be a partner, the rest will be service which a message is sent and is dressed also with whom in a service provision area. A dial-up line is used as a communication network, and a user registers a recitation number, he does [voice] a message and records it to a server. And other users who know the recitation number can hear the message, and can record a message simultaneously. Thus, messages can be exchanged mutually and he can be enjoyed.

[0005]

[Problem(s) to be Solved by the Invention] However, you have to perform keyboard entry, reading all participants' character on real time, since a voice is acquired by pushing a return key quickly, a character is inputted and it sends to a partner in the above chats, the moment all participants became silent (the input finished), when he inputs. Therefore, there was a problem that it was difficult he to say simultaneously "curve", hearing two or more utterances.

[0006] Moreover, with the conventional message dial, since its utterance was recorded after hearing the voice by which the partner was recorded, when each was not able to talk freely like an actual conversation and it talked with two or more partners, there was a problem of being hard to make one's remark.

[0007] this invention is made in view of such a point, communication tends to take it, and it aims at offering the chat server which can enjoy conversation with two or more users.

[0008]

[Means for Solving the Problem] In the chat server which provides a user with the chat which is message switching service between users in order to solve the above-mentioned technical problem in this invention The group management tool which divides a chat item into a group and manages it, and an interface-control means to perform an interface control with the user who has accessed the aforementioned group, When at least two aforementioned users access to the

same aforementioned group When two or more aforementioned users access to the one same aforementioned group as the chat control means which carry out [voice / of the aforementioned users] chat control Each user's voice is compounded and the chat server characterized by having a speech synthesis means to transmit a synthesized speech to the aforementioned chat control means is offered.

[0009] Here, a group management tool divides into a group the item to which a user wants to carry out a chat, and is managed. An interface-control means performs an interface control with the user who has accessed the group. Chat control means perform chat control which is the message switching of users' voice, when at least two users access to the same group. When two or more users access to the same group, a speech synthesis means compounds each user's voice, and transmits a synthesized speech to chat control means.

[0010]

[Embodiments of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to a drawing. Drawing 1 is the principle view of the chat server 10 which is this invention. The chat server 10 of this invention offers with voice the chat which is message switching service between users.

[0011] A user divides into a group beforehand the item which performs a chat, and manages the group management tool 11. for example, the subject of fishing [group / 1 / group / the subject of a motorbike, and / 2] and ... a group called the subject of skiing etc. is managed in Group n

[0012] The interface-control means 12 performs an interface control with the user who has accessed the group. For example, it is connection, cutting, etc. of a circuit accompanying transmission of an user profile or a group list, and a start and end of a chat.

[0013] The chat control means 13 perform chat control which is the message switching of users' voice, when at least two users access to the same group. It is the thing of the message switching control by chat control, i.e., voice. For example, when two users access a group 1, audio message switching is made and it can go into the subject mutually.

[0014] When two or more users access to the same group, the speech synthesis means 14 compounds each user's voice, and generates a synthesized speech. And exchange of a synthesized speech is performed by transmitting this synthesized speech to the chat control means 13. In addition, about operation of the chat server 10, it mentions later by drawing 3 and drawing 4.

[0015] Next, the chat system using the chat server 10 which is this invention is explained. Drawing 2 is the conceptual diagram of a chat system. a chat system -- the chat server 10, the various terminals 20 of the portable telephone 21 by the side of a user, or personal computer 22 grade, a communication network 30, and the network interface 40 -- since -- it becomes

[0016] It connects with a communication network 30 using an attached interface device, and the chat server 10 connects with a communication network 30 the terminal 20 which each user uses through the network interfaces 40, such as LAN. And a chat is performed through the chat server 10 among the arbitrary users who are present in arbitrary places.

[0017] Next, operation of a chat system is explained. In addition, PHS21 which is a personal handy phone machine shall be used as a terminal 20 by the side of a user henceforth. Drawing 3 is the sequence diagram showing the operations sequence of a chat system.

[S1] A user performs call origination to an access point 41 through a base station 31 and ISDN network 30a. An access point 41 connects ISDN network 30a and LAN40a, and performs authentication of how in which a user can receive this chat service here.

[S2] If it succeeds in authentication in an access point 41, it will connect with the chat server 10 through LAN40a.

[S3] The chat server 10 notifies a user of the chart of the group managed with the group management tool 11 explained by drawing 1. Moreover, a group list is displayed on the display module of PHS21 which the user is using.

[S4] A user chooses a group to perform a chat.

[S5] The chat server 10 checks the state of the selected group. If the present chat is not performed in the selected group, it will be in the state waiting for a chat, and a user will be notified of that. If the man of the waiting for a chat results or the chat has already been

performed, a user will go into the subject of the group and will become a chat start.

[0018] Next, operation of the chat server 10 is explained. Drawing 4 is the sequence diagram showing the operations sequence of the chat server 10. In addition, the case where a chat is carried out by 1 to 1 here is explained.

[S10] User A chooses a group 1 and is doing waiting for a chat. In the chat server 10, it saves that User A is the waiting for a chat into a group 1 at an internal table.

[S11] User B chooses a group 1 and performs a chat demand.

[S12] Knowing that the chat server 10 has User A in the waiting for a chat with reference to an internal table, the interface-control means 12 notifies User B of this.

[S13] User B notifies the purport which performs a chat demand with User A to the chat server 10.

[S14] The interface-control means 12 in the chat server 10 notifies to User A that there is a chat demand from User B.

[S15] User A notifies the purport which performs a chat demand with User B to the chat server 10.

[S16] The chat control means 13 exchange the voice message of User A and User B, and a chat is performed through the interface-control means 12.

[0019] As explained above, the chat server 10 of this invention divided the chat item into the group, managed it, and was taken as the composition which carries out [voice / of the user who has accessed the same group] chat control. Thereby, a chat can be carried out with a voice interface and it becomes possible to enjoy a chat with arbitrary men with the same feeling as an ordinary telephone in arbitrary places.

[0020] In addition, although the voice message was exchanged by the chat control means 12 and the voice of User A and User B was returned to each in the above-mentioned explanation, without exchanging a voice message by the chat control means 13 in the chat server 10, the direct file of the user may be carried out with a dial-up line, and you may make it a talk state.

[0021] That is, the interface-control means 12 notifies User's A telephone number to User's B terminal, and User A is made it to do call origination from User B automatically, and it makes it direct telephone. Moreover, the interface-control means 12 may make User A and User B a talk state using the transceiver mode of PHS21 rather than may connect a user with a dial-up line.

[0022] Next, the time of performing a chat with many-to-many is explained. Drawing 5 is a conceptual diagram at the time of performing a chat with many-to-many. The chat server 10 compounds each user's voice with the speech synthesis means 14, when two or more users access to the same group. It is compounded with the speech synthesis means 14 which has Voice A, B, and C in the chat server 10 drawing, and signs that the synthesized speech D is transmitted to a user are shown.

[0023] Next, an exchange of the data between 20 and the chat server 10 is explained in the end of a user side edge. A user performs an exchange of the data based on HTTP (Hyper Text Transfer Pro-tocol) through the interface-control means 12 until he goes into a chat.

[0024] First, the acquisition demand of the chart of a group is advanced from a terminal 20 to the chat server 10. Then, the chat server 10 returns the prepared group. And if a user demands the information on the group said to mind from a terminal 20, the chat server 10 will return the information of the user in the group to a terminal 20.

[0025] Next, the profile data displayed on 20 in the end of a user side edge are explained.

Drawing 6 is drawing showing the example of a display of profile data. Profile data 20a-2 and ** are displayed as group 20a-1 on display screen 20a. User A-E which is accessing the subject of the motorbike of a group 1 is displayed on group 20a-1. If User C is directed here, profile data 20a-2 of User C will be displayed. Thus, the user included in mind can be chosen and it can go into an actual chat.

[0026] As explained above, the chat server 10 of this invention divided the chat item into the group, managed it, and was taken as the composition which performs chat control to the user who has accessed the same group. By this, a chat with voice can be offered by the real time, it is easy to take communication compared with the chat of only the character on the conventional computer, and improvement in service is attained.

[0027] Moreover, the chat server 10 of this invention was taken as the composition which generates a synthesized speech from the voice of two or more users with the speech synthesis means 14. It enables this to offer not only 1 to 1 but many-to-many chat service.

[0028]

[Effect of the Invention] As explained above, the chat server of this invention divided the chat item into the group, managed it, and was taken as the composition which performs chat control to the user who has accessed the same group. Thereby, a chat can be carried out with a voice interface and it becomes possible to enjoy a chat with arbitrary men with the same feeling as an ordinary telephone in arbitrary places.

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TECHNICAL FIELD

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EFFECT OF THE INVENTION

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the principle view of the chat server which is this invention.

[Drawing 2] It is the conceptual diagram of a chat system.

[Drawing 3] It is the sequence diagram showing the operations sequence of a chat system.

[Drawing 4] It is the sequence diagram showing the operations sequence of a chat server.

[Drawing 5] It is a conceptual diagram at the time of performing a chat with many-to-many.

[Drawing 6] It is drawing showing the example of a display of profile data.

[Description of Notations]

10 [.. An interface-control means, 13 / .. Chat control means, 14 / .. Speech synthesis means] A chat server, 11 .. A group management tool, 12

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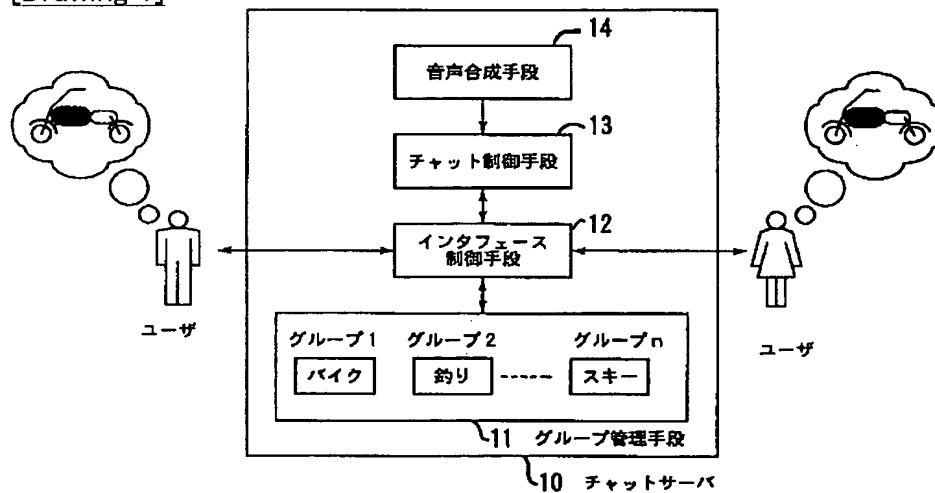
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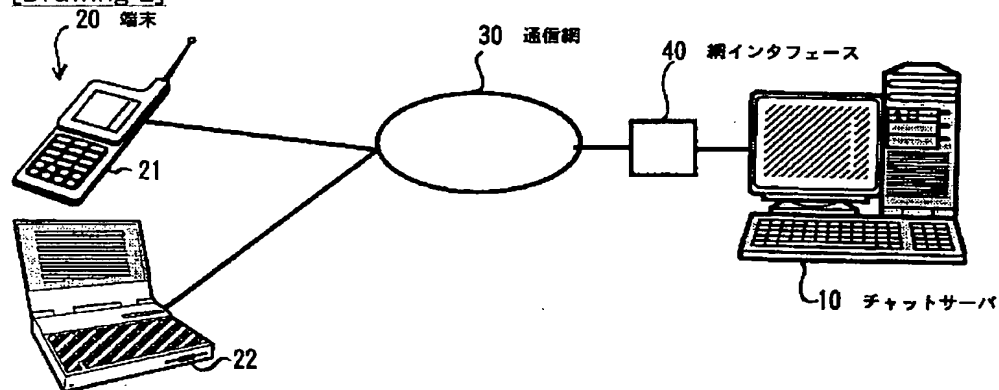
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DRAWINGS

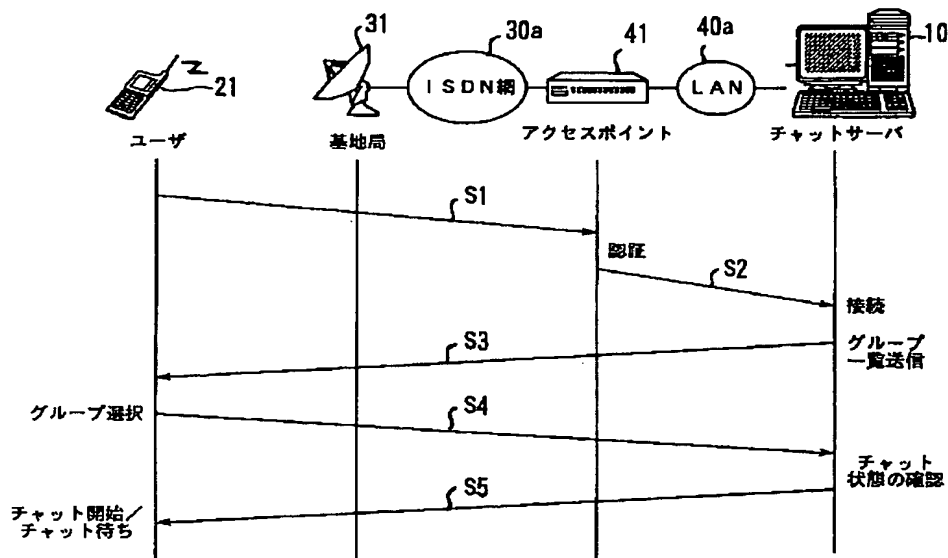
[Drawing 1]



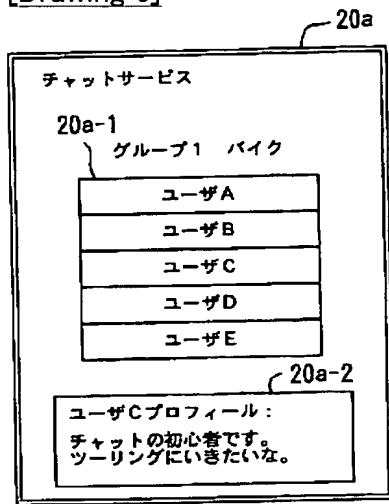
[Drawing 2]



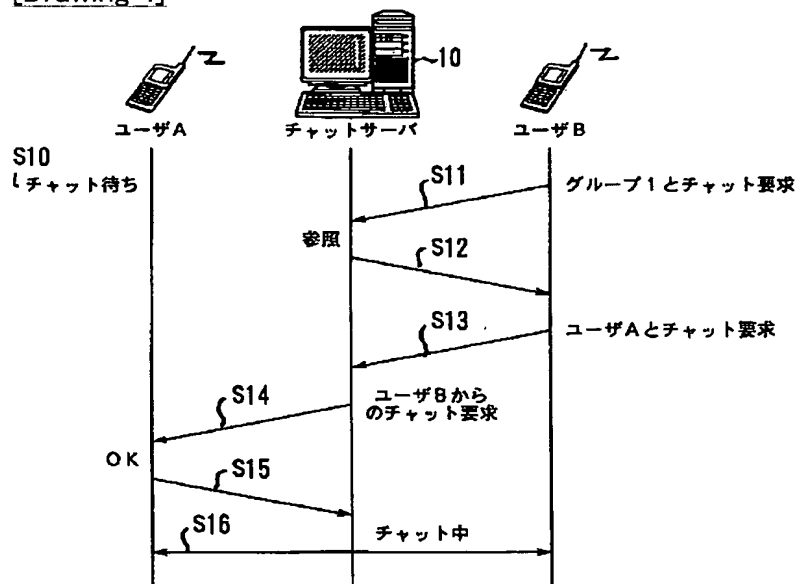
[Drawing 3]



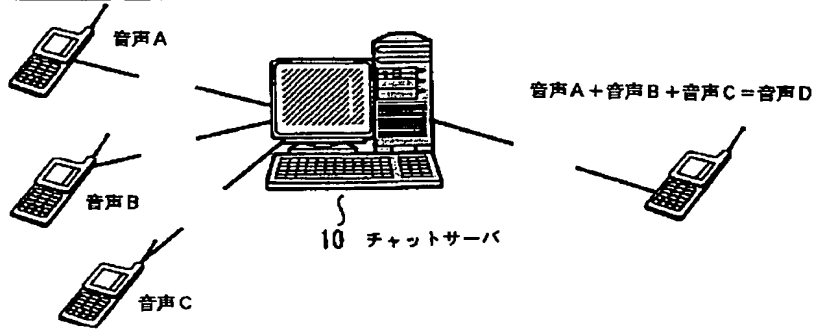
[Drawing 6]



[Drawing 4]



[Drawing 5]



[Translation done.]